ANPA

An Economic Analysis of U.S. Newspaper Growth and Newsprint Consumption with Projections for 1995

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EXECUTIVE SUMMARY

United States newsprint consumption totalled a record 11.59 million metric tons in 1985. Since 1975, U.S. newsprint consumption (30-pound basis weight) has risen 40 percent, considerably more than the 33 percent increase of the nation's Real Gross National Product.

Advertising linage has been a major source of newspaper growth in recent years. In 1985, daily newspapers carried $25.2 billion dollars of advertising--$4.4 billion more than network, spot, local, and cable television combined.

Increased circulation also contributed to newspaper growth and newsprint consumption during the 1975-1985 period. Looking ahead, the demographic configuration of the U.S. population should favor the advance of both circulation and advertising. Between 1985 and 1995, U.S. population aged 30 to 55 years is projected to increase 27 percent. This segment of the population tends to be the most avid users of daily newspapers.

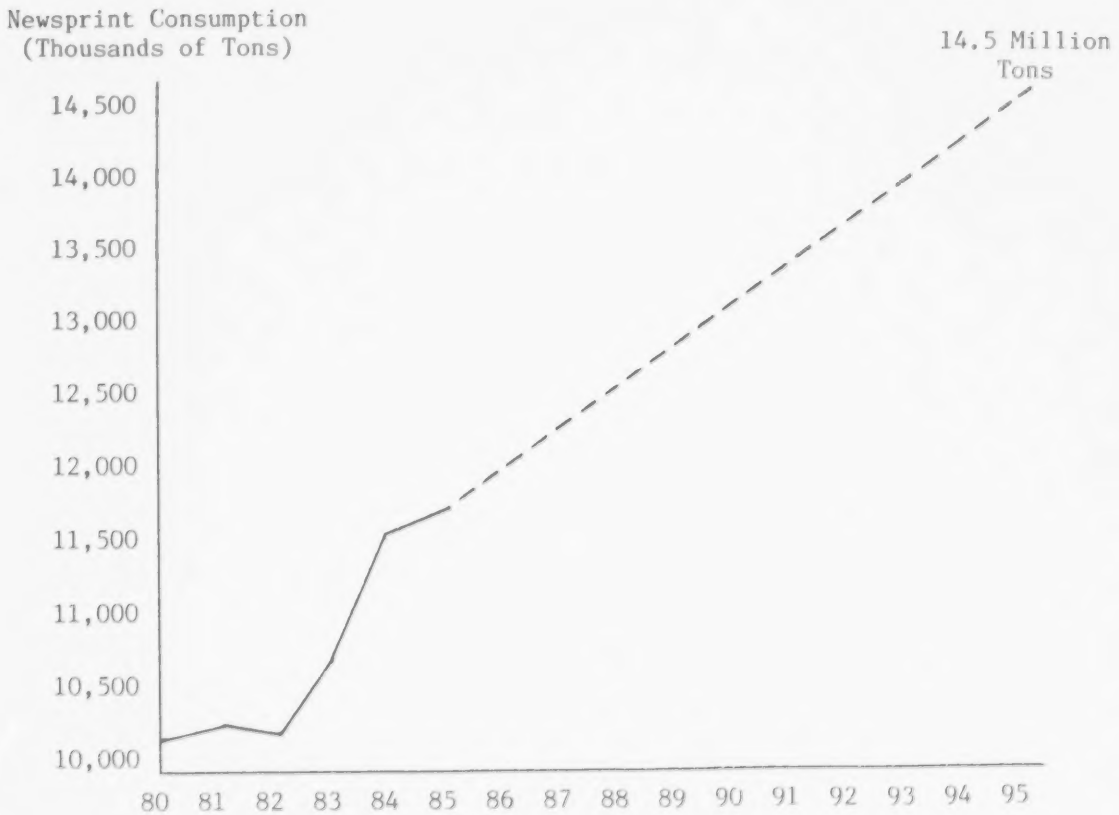
The expansion of cable television will increase the competition for advertising. But that expansion leads to a proliferation of television channels, leaving the newspaper with the best coverage of local markets. Competition from newly emerging electronic media also will increase, but these media are not expected to be a major competitive force within the next ten years. Therefore, newspapers are predicted to continue to be the nation's largest medium of news and advertised information between now and 1995.

U.S. newsprint consumption is projected to have a <u>trend value</u> of 12.9 million tons in 1990. This projection assumes that the U.S. will average only a 2.5 percent annual growth rate in the period between now and 1990. On the other hand, it also assumes that there will be an adequate supply of newsprint.

Although favorable demographic changes will enhance the future growth of U.S. newspapers and newsprint consumption, the primary determinant of their growth will be U.S. economic expansion. In this regard, there is substantial uncertainty

because of the magnitude of the federal government deficit and other problems confronting the U.S. economy. Given this situation, a conservative economic assumption is used to derive a projected demand of 14.5 million metric tons in 1995 (30-pound basis weight). However, if the U.S. economy and newsprint consumption were to repeat their growth rates of the last ten years, U.S. newsprint demand would rise to over 16 million tons by 1995.

Past and Projected Trend of
U.S. Newsprint Consumption
1980-1995



ALL TONNAGE FIGURES IN THIS REPORT
ARE IN METRIC, 30 LB. BASIS WEIGHT.

PART I

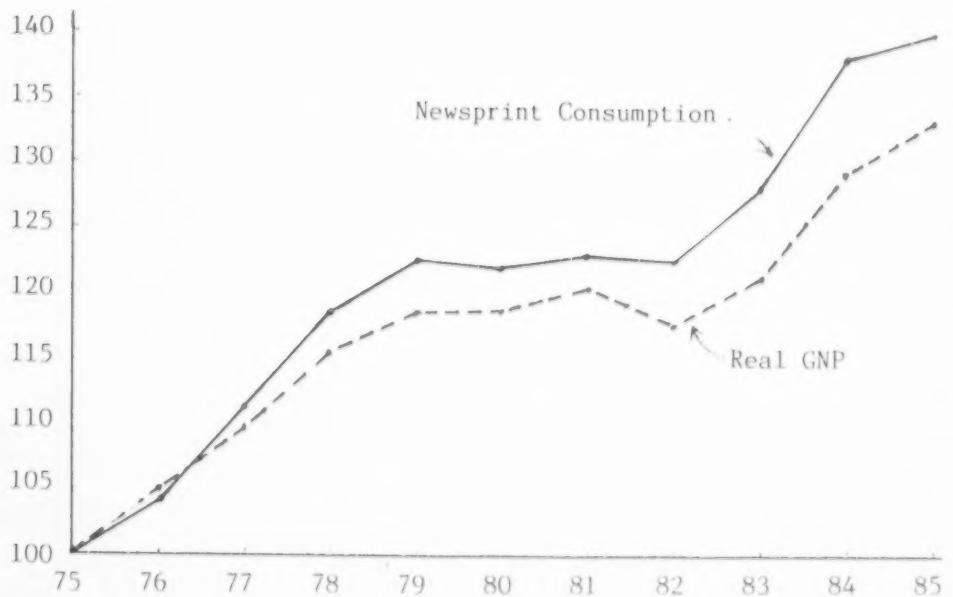
AN OVERVIEW OF THE LAST TEN YEARS

United States newsprint consumption totalled 11.59 million metric tons in 1985--a record high. When adjusted to a 30-pound basis weight, 1985's consumption rises to 11.65 million tons.

The most powerful single factor affecting U.S. newspapers and other users of newsprint is the dynamics of the U.S. economy. Historically, U.S. newsprint consumption rose approximately 2 percent for every 3 percent rise in the nation's Real Gross National Product. However, as illustrated in Figure I, that relationship has changed. Since 1975 U.S. newsprint consumption (30-pound basis weight) has risen 40 percent, considerably more than the 33 percent increase of the nation's Real GNP. As a result, the last ten years has been a period of substantially expanding U.S. newsprint consumption despite slow economic growth during the early years of the eighties.

Figure I

U.S. Newsprint Consumption and
Real Economic Growth, 1975-1985



Data for Figure I

Year	Newsprint Growth Index*	Real GNP Growth Index
1975	100.0	100.0
1976	104.4	104.9
1977	111.5	109.8
1978	118.8	115.6
1979	122.6	118.5
1980	121.8	118.3
1981	122.8	120.5
1982	122.2	117.5
1983	128.2	121.7
1984	138.2	129.5
1985	140.0	133.0

* Index of Newsprint Consumption adjusted to a 30-pound basis weight.

Advertising and Circulation

Advertising linage has been a major source of newspaper growth in recent years. Although U.S. newspapers' share of all advertising dollars has been eroded by intense competition from both traditional and newly emerging competitors, newspapers continue to be the nation's largest advertising medium. In 1985, daily newspapers carried $25.2 billion dollars of advertising--$4.4 billion more than network, spot, local, and cable television combined. As of the mid-1980's, daily newspapers' share of total advertising stood at 26.5 percent, down from 26.8 percent in 1984 and 29.8 percent a decade earlier.

A number of management-inspired developments have helped newspapers to maintain the largest share of advertising expenditures. Among them are increased emphasis on the quality of newspaper reproduction, greater use of color, implementation of the Standard Advertising Unit system and other efforts to attract advertising such as increased promotion and the Future of Advertising Project.

Circulation also has been a source of newspaper strength and rising newsprint usage. Although total daily circulation declined during the early seventies, there has been an increase since 1975 and Sunday circulation has grown substantially. As of 1985, the morning and evening circulation of all U.S. daily

newspapers was 62.8 million. Sunday circulation totalled 58.8 million--7.7 million more than a decade earlier.

With the rising number of media competing for the public's time and attention, maintaining and increasing newspaper circulation requires concerted measures to increase the value of newspapers to readers, including quality of editorial and advertising content, increased use of special features, quality production, and (in the case of large metros) zoned editions catering to the interests of various readers.

A favorable circulation development is the advancing age of the post-World War II baby crop. Households with adult members of 30 to 55 years of age are likely to be the most avid readers of newspapers. They usually own a house, have children, and therefore have a strong interest in the events of their community. They also have a substantial need for goods and services, a limited budget, and therefore are very interested in advertised information. The 30 to 55 years of age population segment of the United States rose to a record 74.8 million as of 1985. By 1995, the population of this age grouping is projected to rise to 95.1 million--an increase of 27 percent. This increase should contribute to both newspaper circulation and advertising.

A favorable advertising development is the maturation of network television and, despite the rapid growth rate of cable television advertising, maturation of the overall television industry. The proliferation of television channels continues and increases the number of alternatives available to the public. However, a person can attend to only one channel at a time. In addition, the proliferation of television channels fragments the viewing audience, leaving the newspaper as the major medium reaching a large share of the market area it serves. In this regard, it is appropriate to note that in 1985 total newspaper advertising revenues advanced 7.0 percent while the advertising revenues of all television media rose only 5.6 percent.

An adverse newspaper advertising revenue factor is the continuing growth of preprinted advertising. Although most preprints ultimately become a part of a newspaper, the revenues received by the newspaper are substantially less than those derived from newspaper run of paper advertising. Thus, the growth of preprinted advertising inserts has had a negative impact on the growth of newspaper revenues. However, the growth of preprinted inserts probably does not have an adverse effect on newsprint consumption because most of them are printed on newsprint. In other words, preprints increase the total volume of advertising associated with newspapers, therefore increasing newsprint consumption.

Still other significant developments are the growth of direct mail, marriage mail, and electronic media. Although the latter has received widespread attention and speculation for many years, direct mail has been a far more formidable competitor. As of 1985, direct mail--with 16.4 percent of the total advertising market--was the nation's third largest advertising medium. Direct mail advertising revenues totalled $15.5 billion, 12.3 percent more than in 1984. Although a formidable competitor, it is encouraging to see another example of the continued attractiveness of printed media in a day and age of rapidly advancing electronic technology.

The Electronic Competitor

During the last ten years there have been numerous predictions of an adverse future for newspapers because of the advent of home electronic media such as teletext and videotex.* Nationally and internationally, experiments involving home electronic communication systems have been and are being conducted. Several daily newspapers have been active in these experiments and some provide an electronic information service to their market. However, there is little evidence that new electronic media will have an appreciable effect on newspapers and newsprint

*Studies and predictions have been made by International Resources Development, Inc.; Arthur D. Little, Inc.; Quantum Sciences, and others.

consumption at any time between now and 1995.

This conclusion is based not only on the results of electronic media experiments in the U.S. and abroad (such as Viewtel 202--an electronic newspaper of Birmingham, England--and the Prestel videotex system) but also on the following observations:

1. A large proportion of the U.S. population does not use computers. Although children receive computer courses in school and computers are increasingly used at work, the majority either do not know how to use a computer or do not care to use one in their home.
2. Electronic communications technology (hardware and software), although declining in price, is still fairly costly. Many people are willing to expend hundreds or thousands of dollars for television and sound equipment, but such expenditures are primarily viewed as recreational investments. For example, most consumers do not purchase a television receiver or stereo system because of the editorial and advertising information it will provide; it is purchased primarily for amusement.
3. Extensive utilization of the emerging electronic media requires effort on the part of the user. Even if the information were available through the electronic media, securing only 10 percent of the information contained in a typical daily newspaper would require considerably more effort than that required to read a newspaper. Therefore, the new electronic communications media lack a major advantage which is enjoyed by radio and television (which require even less expertise and effort than reading a newspaper).

The above does not imply that home electronic communications systems will not continue to develop; instead, they are likely to be a growing competitor to at least portions of the daily newspaper and other established media. However, for the foreseeable future home electronic communications are most likely to be a

supplement to the established media and newspapers are likely to continue to prevail as the nation's largest medium of news and advertising information for many years to come. Given this prediction, a close examination of recent newspaper trends should be of value in forecasting future newspaper growth and newsprint consumption.

A Decade of Growth

The most recent decade for which complete data are available is 1975-1985. The remainder of Part I is devoted to an examination of newspaper and newsprint consumption growth during this period.

Because strikes against newspapers temporarily affect their newsprint consumption, the data are adjusted for the impact of strikes against newspapers. In 1975, 6,631 metric tons were lost due to strikes; in 1985 the loss was 23,184 tons. Therefore, the adjusted growth is slightly greater than the actual growth, but it more accurately reflects the expansion of newspapers and newsprint consumption.

Consumption data also are adjusted to a 30-pound basis weight. This provides a more accurate picture of both newspaper and newsprint consumption growth than the use of actual tonnages.

As shown in Table I, total U.S. newsprint consumption (adjusted for strikes) rose 40.2 percent during the 1975-1985 period. The 11.67 million ton consumption of 1985 was 3.35 million tons more than that of 1975.

Newsprint consumption by daily newspapers reporting to ANPA rose 29.9 percent during the 1975-1985 decade. A major portion of the difference between this growth rate and that of total consumption is undoubtedly due to the rapid growth of preprinted advertising inserts. Most of the tonnage involved is not included in newspapers' consumption data, even though the inserts ultimately became a part of the daily newspaper. Even without much of the preprint insert tonnage, daily newspapers accounted for 73.7 percent of the nation's newsprint consumption during 1985. While down from the 79.6 percent ratio of ten years earlier, a substantial

but unknown, proportion of the decline is due to the rise of preprinted advertising inserts.

Table I

Changes in Newsprint Consumption by U.S. Daily Newspapers in Various Geographic Regions

1975-1985[1]

Source: Daily Newspapers Reporting to ANPA

Region	1975 Consumption	1985 Consumption	Tons Change	Percent Change
Northeast	1,755,060	2,116,559	361,499	20.6
North Central	1,766,129	1,805,062	38,933	2.2
South	1,872,792	2,749,799	877,007	46.8
West	1,232,576	1,935,282	702,706	57.0
Total Consumption by U.S. Dailies	6,626,557	8,606,702	1,980,145	29.9
Total U.S. Consumption by All Users	8,327,631	11,674,184	3,346,853	40.2

Regional Consumption Growth

Table I also presents changes in newsprint consumption by daily newspapers in the four major regions of the United States during the 1975-1985 period. Newspapers in the West enjoyed the highest rate of growth. Their newsprint usage expanded 703,000 tons, a gain of 57 percent during the decade.

Newspapers in the South experienced the greatest amount of absolute growth. Their newsprint consumption expanded 877,000 tons or almost 47 percent during the 1975-1985 period.

Consumption by North Central Region newspapers grew very little, up 39,000 tons or 2.2 percent. In the Northeast, the usage of newsprint expanded 361,000 tons during the 1975-1985 period, an increase of about 21 percent. That increase

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[1] The newspaper consumption data do not include foreign language newspapers, college newspapers, special service dailies, The Christian Science Monitor, The Wall Street Journal, The Journal of Commerce and The Daily Racing Form. Consumption data are adjusted for temporary losses due to major strikes against newspapers. Total consumption by U.S. dailies may not precisely equal regional or city size data because of rounding. Listing of regions are shown on page 30.

is noteworthy as there were previous ten-year periods when Northeastern dailies had consumption shrinkages rather than substantial expansion. The change undoubtedly is related to the economic resurgence of several Northeastern states.

Growth by City Size

A ten-year analysis of newsprint consumption by newspapers in cities of various sizes is presented in Table II. Newspapers in each of the city-size classifications expanded considerably (i.e., 14.7 percent or more) during the last decade.

Daily newspapers in towns and cities of 100,000 to 250,000 population enjoyed the highest rate of growth--over 43 percent. Their increase of 416,000 tons accounted for 21 percent of the total rise of consumption by all daily newspapers.

Newspapers located in cities of less than 100,000 people experienced about a 36 percent increase in their newsprint usage--555,000 tons more than in 1975. Their increased newsprint consumption constituted 28 percent of the total 1975-1985 increase.

Table II

Changes in Newsprint Consumption by U.S. Daily Newspapers in Cities of Various Sizes

1975-1985[2]

Source: Daily Newspapers Reporting to ANPA

City Size	1975 Consumption	1985 Consumption	Tons Change	Percent Change
Less than 100,000	1,553,197	2,107,803	554,606	35.7
100,000 to 250,000	960,331	1,376,051	415,720	43.3
250,000 to 500,000	1,233,732	1,670,466	436,734	35.4
500,000 to 1 million	1,224,974	1,555,446	330,472	27.0
1 million and over	1,654,323	1,896,936	242,613	14.7
All Daily Newspapers	6,626,557	8,606,702	1,980,145	29.9

[2]Ibid.

In cities of one-quarter to one-half million people, consumption expanded 437,000 tons or 35 percent during the 1975-1985 period. That increase constituted 22 percent of the total rise of consumption by daily newspapers.

Newspapers in cities of one-half to one million population increased their newsprint usage by 330,000 tons or 27 percent. Newsprint consumption by newspapers in cities of over one million advanced 243,000 tons or about 15 percent during the 1975-1985 period. Newspapers in the two largest city-size classifications accounted for 29 percent of the total rise of consumption by dailies.

Newspapers in towns and cities of less than 100,000 are now the largest consumers of newsprint. Their 2.1 million ton consumption as of 1985 exceeded the newsprint usage of newspapers in any other city-size classification.

Regional Circulation Changes

As previously noted, circulation is a major factor in the rise or fall of newsprint consumption. The daily circulation of the U.S. newspapers included in this analysis was 60.76 million as of 1985--2.27 million more than ten years earlier.

Daily circulations in the four geographic regions of the United States are shown in Table III. The largest growth of circulation occurred in the West where daily circulation rose almost 1.8 million or 18.2 percent during the ten-year period.

The other region with daily circulation growth was the South. Here circulation also expanded about 1.8 million, a gain of 10.6 percent.

Daily circulation in the North Central Region fell 752,000 or 4.5 percent during the 1975-1985 period. In the Northeast, circulation declined one-half million or 3.3 percent during the ten years.

The Sunday circulation of newspapers increased in all regions of the United States except the Northeast. In the West, Sunday circulation expanded over 30 percent to 11.3 million in 1985. Southern newspapers enjoyed a 21 percent rise to over 18.7 million circulation.

Sunday circulation as of 1985 totalled 13.3 million in the Northeast and 14.7 million in the North Central Region. Circulation in the Northeast was down 2.6 percent from that of a decade earlier. Among North Central newspapers, Sunday circulation rose 14.4 percent during the 1975-1985 period.

Table III

Regional Changes in Circulation of U.S. Daily Newspapers

1975-1985[3]

Source: Standard Rate and Date Service, Inc.

DAILY CIRCULATION

Region	1975	1985	Change	Percent Change
Northeast	15,546,346	15,031,640	-514,706	-3.3
North Central	16,561,834	15,809,464	-752,370	-4.5
South	16,593,725	18,351,377	1,757,652	10.6
West	9,785,425	11,568,339	1,782,914	18.2
Total	58,487,330	60,760,820	2,273,490	3.9

SUNDAY CIRCULATION

Region	1975	1985	Change	Percent Change
Northeast	13,633,444	13,274,107	-359,337	-2.6
North Central	12,820,370	14,671,716	1,851,346	14.4
South	15,460,202	18,733,990	3,273,788	21.2
West	8,675,395	11,315,219	2,639,824	30.4
Total	50,589,411	57,995,032	7,405,621	14.6

Circulation by Size of City

During the ten years daily circulation rose in all city-size classifications of less than one-half million population. As shown in Table IV, total daily circulation of newspapers in cities of less than 100,000 expanded 2.3 million or 9.8 percent. Their 1985 circulation, totaling 25.8 million, was substantially greater than that of any other city-size classification.

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[3]See footnote 1, Table I, for newspapers not included in the analysis.

Table IV

Changes in Circulation of Daily Newspapers
in Cities of Various Sizes

1975-1985[4]

Source: Standard Rate and Data Service, Inc.

DAILY CIRCULATION

City Size	1975	1985	Change	Percent Change
Less than 100,000	23,551,441	25,848,050	2,296,609	9.8
100,000 to 250,000	8,628,313	9,721,498	1,093,185	12.7
250,000 to 500,000	9,097,673	9,244,853	147,180	1.6
500,000 to 1 million	7,793,190	7,346,860	-446,330	-5.7
1 million and over	9,416,713	8,599,559	-817,154	-8.7
All U.S. Dailies	58,487,330	60,760,820	2,273,490	3.9

SUNDAY CIRCULATION

City Size	1975	1985	Change	Percent Change
Less than 100,000	12,971,688	17,375,887	4,404,199	34.0
100,000 to 250,000	8,364,690	10,893,563	2,528,873	30.2
250,000 to 500,000	9,629,133	11,132,051	1,502,918	15.6
500,000 to 1 million	7,948,677	8,753,921	805,244	10.1
1 million and over	11,675,223	9,839,610	-1,835,613	-15.7
All U.S. Dailies	50,589,411	57,995,032	7,405,621	14.6

The daily circulation of newspapers in cities of 100,000 to 250,000 rose 1.1 million or 12.7 percent. In cities of one-quarter to one-half million, the increase was 147,000 or 1.6 percent.

Circulation losses were experienced in large cities during the 1975-1985 period. Daily circulation declined 446,000 or 5.7 percent among cities of one-half to one million population. In urban centers of one million or larger, the decline was 0.8 million or 8.7 percent during the ten years.

Changes in Sunday circulation also were inversely related to city size. In towns and cities of less than 100,000, Sunday circulations grew 4.4 million or

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[4]Ibid.

34 percent. There was a considerable expansion of Sunday circulation in all other city-size classifications except that of one million and over. The Sunday circulation of large metropolitan newspapers declined 1.8 million or about 16 percent during the decade.

Several developments account for the substantial rise of Sunday circulation in small cities and the decline in large metropolitan areas. First, many small city newspapers have added Sunday editions during the past decade. This has enhanced the total Sunday circulation of small city newspapers while adversely affecting some large city newspaper circulations.

With rising costs prompting higher circulation rates, the out-of-town circulation of metropolitan newspapers has been adversely affected, especially where a local Sunday newspaper is available. Having a similar effect is the rising size and quality of small city Sunday newspapers.

Lastly, high distribution costs have prompted some metropolitan newspapers to reduce out-of-town circulations. Increasingly, newspaper management is calculating the costs and benefits of each circulation area, and eliminating those which are unprofitable or only marginally profitable.

Newsprint Supply 1975-1985

Sources of newsprint supply for daily newspapers in each region of the United States are shown in Table V. These data also are adjusted for temporary losses due to strikes against newspapers and changes in basis weight.

While newsprint consumption by U.S. daily newspapers reporting to ANPA rose 29.9 percent during the ten years, United States mills increased their tonnage supplied to these newspapers by 43.5 percent. Newsprint originating in Canada rose 17.9 percent. As a result, the U.S. producers' share of the market rose from 38.9 percent in 1975 to 43.0 percent in 1985. Canada's share of the market declined from 60.7 percent to 55.1 percent during the ten years. Overseas suppliers accounted for 0.4 percent of the U.S. newspaper market in 1975 and 1.9 percent in 1985.

Table V

Source of Newsprint Supply for U.S. Daily Newspapers

1975-1985[5]

Source: Daily Newspapers Reporting to ANPA

Location of Suppliers	Tons Supplied 1975	Tons Supplied 1985	Tons Change	Percent Change	Share of Supply 1975	Share of Supply 1985
United States	2,576,162	3,697,966	1,121,804	43.5	38.9	43.0
Northeast	400,451	395,939	-4,512	-1.1	6.0	4.6
North Central	97,363	81,075	-16,288	-16.7	1.5	0.9
South	1,481,798	2,171,539	689,741	46.5	22.4	25.2
West	596,550	1,049,413	452.863	75.9	9.0	12.3
Canada	4,024,485	4,745,434	720,949	17.9	60.7	55.1
East	3,408,900	3,972,225	563,325	16.5	51.4	46.1
West	615,585	773,209	157,624	25.6	9.3	9.0
Overseas	25,910	163,302	137,392	530.3	0.4	1.9
Total Supply to U.S.	6,626,557	8,606,702	1,980,145	29.9	100.0	100.0

Despite the 1975-1985 decline in Canada's share of the market, mills in East Canada increased their shipments to U.S. newspapers by 16.5 percent, while mills in West Canada saw their tonnage rise 25.6 percent during the ten-year period.

Southern U.S. mills expanded their shipments to U.S. daily newspapers by 690,000 tons or 46.5 percent during the decade. Also enjoying a substantial increase--453,000 tons or 75.9 percent--were mills located in the West Region of the United States. Mills in the Northeast and North Central Regions saw their shipments to newspapers decline slightly during the 1975-1985 period.

As of 1985 the major sources of supply to U.S. newspapers were East Canada (46.1 percent), the South U.S. (25.2 percent), West U.S. (12.3 percent) and West Canada (9.0 percent).

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[5]See footnote 1, Table I.

Regional Sources of Supply

The sources of supply for newspapers in each region of the United States are shown in Table VI. During 1985, newspapers in the Northeast received 80.6 percent of their newsprint from East Canada, with most of the remaining supply (14.1 percent) coming from Northeast U.S. mills.

North Central newspapers received 80.8 percent of their newsprint from East Canadian mills during 1985, while Southern mills supplied 12.1 percent of the region's requirements. Most of the remaining tonnage came from mills in the North Central Region and West Canada.

Southern newspapers received 72.5 percent of their newsprint from U.S. mills in 1985, with the majority (67.1 percent) coming from producers in the region. Canadian mills, primarily producers in East Canada, supplied 26.3 percent of the southern newspapers' requirements.

As of 1985, West U.S. newspapers received 51.3 percent of their supply from West U.S. mills. Almost 37 percent of their newsprint came from West Canadian mills. East Canadian mills supplied 4.7 percent of the West's requirements, while offshore producers supplied 5.9 percent.

Table VI

Regional Sources of Newsprint for U.S. Daily Newspapers

1975-1985[6]

Source: Daily Newspapers Reporting to ANPA

Location of Suppliers	Tons Supplied 1975	Tons Supplied 1985	Tons Change	Percent Change	Share of Supply 1975	Share of Supply 1985
		NORTHEASTERN NEWSPAPERS				
United States	379,380	384,151	4,771	1.3	21.6	18.1
Northeast	353,333	298,918	-54,415	-15.4	20.1	14.1
North Central	-------	-------	---------	-----	----	----
South	26,047	84,209	58,162	223.3	1.5	4.0
West	-------	1,024	1,024	inf.	----	nil
Canada	1,374,940	1,716,641	341,701	24.9	78.4	81.1
East	1,374,940	1,705,858	330,918	24.1	78.4	80.6
West	-------	10,783	10,783	inf.	----	0.5
Overseas	740	15,767	15,027	2,030.7	nil	0.8
Total Supply to Northeast	1,755,060	2,116,559	361,499	20.6	100.0	100.0
		NORTH CENTRAL NEWSPAPERS				
United States	268,198	302,720	34,522	12.9	15.2	16.8
Northeast	12,014	5	-12,009	inf.	0.7	nil
North Central	87,847	81,073	-6,774	-7.7	5.0	4.5
South	168,285	218,706	50,421	30.0	9.5	12.1
West	52	2,936	2,884	inf	nil	0.2
Canada	1,497,252	1,501,692	4,440	0.3	84.8	83.2
East	1,451,100	1,459,092	7,992	0.6	82.2	80.8
West	46,152	42,600	-3,552	-7.7	2.6	2.4
Overseas	679	650	-29	-4.3	nil	nil
Total Supply to North Central	1,766,129	1,805,062	38,933	2.2	100.0	100.0
		SOUTHERN NEWSPAPERS				
United States	1,322,017	1,994,282	672,265	50.9	70.6	72.5
Northeast	35,103	97,007	61,904	176.3	1.9	3.5
North Central	8,373	2	-8,371	-100.0	0.4	nil
South	1,269,955	1,843,910	573,955	45.2	67.8	67.1
West	8,586	53,363	44,777	521.5	0.5	1.9
Canada	536,344	722,273	185,929	34.7	28.6	26.3
East	534,454	716,481	182,027	34.1	28.5	26.1
West	1,890	5,792	3,902	206.5	0.1	0.2
Overseas	14,431	33,244	18,812	130.4	0.8	1.2
Total Supply to South	1,872,792	2,749,799	877,007	46.8	100.0	100.0
		WESTERN NEWSPAPERS				
United States	606,568	1,016,813	410,245	67.6	49.2	52.5
Northeast	-------	9	9	Inf.	----	nil
North Central	1,144	-------	-1,144	inf.	0.1	----
South	17,512	24,715	7,203	41.1	1.4	1.2
West	587,912	992,089	404,177	68.7	47.7	51.3
Canada	615,949	804,828	188,879	30.7	50.0	41.6
East	48,406	90,794	42,388	87.6	4.0	4.7
West	567,543	714,034	146,491	25.8	46.0	36.9
Overseas	10,059	113,641	103,582	1,029.7	0.8	5.9
Total Supply to West	1,232,576	1,935,282	702,706	57.0	100.0	100.0

[6]Ibid.

PART II

EVALUATION OF PAST PROJECTIONS

In a 1977 ANPA study, your author projected a U.S. newsprint consumption of 12.5 million short tons or 11.34 million metric tons as of 1985.[7] It was emphasized that the trend projection "...makes no attempt to predict where 1985 will be in the business cycle. If 1985 is a highly prosperous year in the business cycle, the 12,500,000 ton trend projection should be exceeded." It was also noted that, "With rapid economic growth, newsprint consumption could reach 13,000,000 (short) tons by 1985.[8] In 1980, the 1985 projection was reconsidered and confirmed.[9]

The year 1985 was one of economic expansion, and it followed two preceding years of unusually rapid national economic growth. As a result, the Real Gross National Product of 1985 was somewhat above its secular trend. Therefore, if the 1985 projection were accurate, actual U.S. newsprint consumption should have exceeded 11.34 million metric tons and been within a range of 11.34 to 11.79 million metric tons, i.e., 12.5 to 13 million short tons. Actual consumption as of 1985 did exceed 11.34 million metric tons. When adjusted to a 30-pound basis weight, 1985 U.S. newsprint consumption totalled 11.65 million tons--well within the predicted range. Therefore, the 1985 projection, made in 1977 and confirmed in 1980, was accurate.

In 1983, your author projected a 1990 U.S. newsprint consumption of 12.2 million metric tons.[10] That projection assumed an average annual 2.5 percent growth rate of the U.S. economy during the 1982-1990 period. During the

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[7] Future Newspaper and Newsprint Growth 1977-1985 by Jon G. Udell, published by ANPA in June 1978.

[8] Ibid., p. 52.

[9] The Future of U.S. Newspapers and Newsprint Consumption 1980-1985 by Jon G. Udell, published by ANPA in February 1981.

[10] The Outlook for U.S. Newspapers and Newsprint Consumption 1983-1990 by Jon G. Udell, published by ANPA in May 1983.

first three years of that period, average economic growth substantially exceeded the assumed 2.5 percent average growth rate. However, just as in early 1983 there was a "...danger that too much emphasis is being placed on current economic problems and the lack of growth during the last three years,"[11] there is a danger today that too much emphasis will be placed on the robust growth of the most recent three-year period.

To a substantial degree, the future health of the U.S. economy is dependent upon a reduction of federal government deficit spending. Economic and political pressures to reduce deficit spending are rising. However, it is doubtful that a meaningful reduction can be accomplished without a temporary adverse effect on the U.S. economy.

On the other hand, little or no future progress may be realized in diminishing federal government deficit spending. If this were to occur, economic growth may be unimpaired in the near future but greatly diminished longer range. For example, continued large annual deficits could easily cause a future resurgence of inflation, rising interest rates, and a shortage of capital. Rising interest rates could precipitate major defaults by foreign and domestic borrowers and huge losses among financial institutions. A financial crisis, even a major depression, could result.

In any event, with or without progress in moving toward a balanced federal budget, U.S. economic growth is likely to suffer some impairment in the years ahead. Such impairment will be partially offset by favorable demographic trends--primarily the growing proportion of the U.S. population which is in the most productive and consumptive stage of the human life cycle. In addition, the senior citizen population segment is expanding. Because a large proportion of senior citizens has savings, social security benefits and pension benefits, senior citizens now constitute a relatively affluent market for the economy to serve. In

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[11] Ibid.

essence, the years ahead hold substantial promise in terms of expanding markets, but future U.S. economic growth may be diminished by severe financial problems inherited from the past.

Even with a possible reduction in the future rate of economic expansion, U.S. newspapers and newsprint consumption are likely to expand. As illustrated by the 1975-1985 period, the advance of newsprint consumption no longer lags that of the economy, but exceeds it. Favorable demographic trends and other forces are likely to facilitate the growth of newsprint consumption in the foreseeable future. As a consequence, the 12.2 million ton projected demand trend value for 1990 appears to be conservative. Therefore, a revised projection is appropriate.

Based upon the demand trend projected for 1995, which will be presented in Part III of this report, the trend value for U.S. newsprint consumption in 1990 is projected to be 12.9 million tons. This projection is based upon a conservative prediction of U.S. economic growth and also assumes that there will be a recession between now and 1990. Should these assumptions prove to be too conservative, U.S. newsprint consumption in 1990 could easily reach a higher level, such as 13.5 million tons, if there is an adequate supply of newsprint. On the other hand, if severe economic stress were to arise because of problems associated with the large federal deficit, the original 12.2 million ton projection for 1990 would probably prove to be accurate. In addition, it should be recognized that actual consumption in 1990 is likely to be above or below the projected trend if the U.S. economy is near the peak or valley of an economic cycle.

PART III

PROJECTIONS FOR 1995

As the history of U.S. newspaper growth and newsprint consumption vividly reveals, U.S. economic expansion will be the primary determinant of future newsprint demand. Although other forces such as newspapers' competitive conditions also are involved, it is appropriate to commence with a forecast of U.S. economic growth.

U.S. Economic Growth, 1985-1995

Several dimensions of the nation's economic future already have been considered--namely, the favorable future demographic configuration and the unfavorable implications of the huge federal government deficit. Still other unfavorable forces include the large U.S. trade deficit, adverse conditions in large portions of the agricultural, energy, and industrial goods sectors of the economy, and weaknesses in a considerable segment of the financial community (e.g., bank failures). On the other hand, numerous U.S. producers have significantly increased their economic efficiency in recent years and the international value of the U.S. dollar has declined, making U.S. products more competitive in the world market.

Economic projections of future U.S. economic growth are not scarce but, as in past ANPA studies, forecasts by other economists and agencies will not be relied upon. However, given the erosion of U.S. industry's share of world markets, a survey of the chief executives of Fortune 500 companies was conducted. Although chief executives have little if any special expertise in economic forecasting, the leaders of Fortune 500 companies not only are intimately involved in the course of economic events, they command substantial resources for monitoring and predicting the economy. Therefore, they should possess superior insight into the future of the U.S. economy.

Twenty-one percent or 105 of the chief executives of Fortune 500 companies elected to participate in the survey. Interestingly, there was substantial disparity in their views concerning the likelihood of a U.S. financial crisis or depression in the years ahead. Approximately one-half foresee a high probability of severe economic distress between now and 1995 and the other one-half do not. On average, the executives assign almost a 50 percent probability to an economic crisis between now and 1995.

In general, the Fortune 500 executives also foresee increased international price competition, a significant transformation of almost every major U.S. industry because of advancing technology, increased productivity growth in U.S. manufacturing industries, and continued erosion of U.S. industry's share of world markets. Despite numerous negative dimensions in their views of the future, most Fortune 500 executives predict a fairly healthy rate of real U.S. economic growth. Over 92 percent of their predictions fell within a range of 2 to 4 percent average annual economic growth between 1985 and 1995. There was a fairly strong consensus that the average real rate of expansion will be 3 percent. This would be almost unchanged from the growth rate which prevailed during the prior ten years.

Given the results of the Fortune 500 survey, two alternative rates of economic growth will be assumed in deriving projections of future U.S. newsprint consumption--3 percent and 2.5 percent. The latter will be used to provide the reader with insight into the future of newsprint under somewhat adverse economic conditions during the years ahead.

Regression Projections of Future Newsprint Consumption

Regression analysis is an analytical technique which measures quantitative relationships between or among various variables. The utilization of regression

techniques enables one to mathematically explain[12] most of the historic changes in newsprint consumption by relating those changes to variations in population, the Real Gross National Product, and other variables. Therefore, if a close and continuing relationship exists between newsprint consumption and another variable, such as adult population, a projection of future adult population can be used to predict future newsprint consumption.

This prediction is derived by using the regression equation which in simple form is $V_1 = a + bV_2$. In the case at hand, V_1 is newsprint consumption (the dependent variable) and V_2 is adult population, or any other independent variable which one wishes to use in predicting newsprint consumption. When the parameters a and b are computed from past data, the equation $V_1 = a + bV_2$ provides a precise mathematical statement of the historic relationship between newsprint consumption and the independent variable.

The regression equation can be used to derive an accurate projection of future newsprint consumption <u>if</u> three conditions are met:

1. The historic relationship expressed by the equation explains most of the past variations in newsprint consumption.
2. The historic relationship is stable and continues to prevail in the future.
3. One is able to accurately predict the future value of the independent variable.

As for these three conditions, only the first can be ascertained with a high degree of certainty. One can measure the percent of past variations (i.e., annual changes) in newsprint consumption which is explained by the regression equation. This measure, R^2, is called the coefficient of determination.

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[12]The "explained variation" of a regression analysis may or may not be due to a <u>real</u> relationship between the variables involved.

As for the second condition--stability of the regression relationship--past stability provides some confidence. However, careful analysis of all past and current dynamics affecting newsprint consumption is necessary to derive a judgment as to the likely future stability of the relationship.

For some independent variables, one can be quite certain about their future values (condition 3). For example, the adult population of 1995 is already born and in existence. Only unexpected changes in the U.S. death and immigration rates could cause the 1995 projection of adult population to be in substantial error. However, for other possible independent variables, such as future economic growth, the 1995 projection could be substantially in error.

The regression equation $V_1 = -4160 + 0.0925V_2$ represents the historical relationship between newsprint consumption (V_1) and population aged 20 and over (V_2). The equation was derived using newsprint consumption[13] and population data during the years 1960-1985. The equation is fairly "powerful" in explaining the annual changes in newsprint consumption during that time period. The coefficient of determination (R^2 adjusted for degrees of freedom) is 96.2 percent. In other words, over 96 percent of the total variation in newsprint consumption during the years 1960 through 1985 may be mathematically explained by the apparent relationship between newsprint consumption and population aged 20 and over.

The Bureau of the Census predicts (middle series projections) that U.S. population, aged 20 and over, will total almost 186 million in 1995.[14] If this population prediction were realized and the historical relationship continued to prevail, a newsprint consumption of 13.033 million tons in 1995 would be likely.[15]

---

[13]Newsprint consumption in metric tons, 30-pound basis weight; data for the years 1960-1974 were adjusted for the consumption effect of conservation measures occurring during the midseventies.

[14]More precisely, 185,867,000.

[15]The regression equation uses data in thousands; therefore, $-4160 + 0.0925 \times 185{,}867 = 13.033$ million tons.

Despite the fact that regressions between newsprint consumption and population are capable of explaining a high percentage of all past variations in consumption, other variables need to be considered. In fact, newsprint consumption is more closely related to economic variables, such as the Real Gross National Product, than it is to population. For example, during the 1960-1985 period the regression between U.S. newsprint consumption and the Real Gross National Product explained 98.5 percent of all the annual variations in consumption. If this more "powerful" simple regression of U.S. newsprint consumption to Real GNP is utilized and one assumes a 3.0 percent average annual growth rate of Real GNP, the resulting 1995 projection of newsprint consumption is 15.153 million tons.

If both Real GNP and population aged 20 and over are used, the percentage of explained variation is 98.6 percent. The equation, $V_1 = -533 + 2.4365V_2 + 0.0191V_3$, expresses the historical relationship of newsprint consumption (V_1) to Real GNP (V_2) and population aged 20 and over (V_3). Using this equation, the Bureau of the Census middle series projections of population, and a 3.0 percent assumed annual growth rate of the nation's Real GNP, a newsprint consumption projection of 14.756 million tons is derived for 1995. If the average annual growth rate of the Real GNP is decreased to 2.5 percent, the 1995 newsprint consumption projection falls to 14.198 million tons.

There are many variables which can be used to explain past changes and U.S. newsprint consumption and to predict future consumption. Among them are years (i.e., a time series regression), total population, population 20 and over, civilian population 16 and over, Real Gross National Product, per capita Real GNP, real disposable personal income, per capita real disposable personal income, real personal consumption expenditures, per capita real personal consumption expenditures, and others. All of these variables were used, singularly and in combinations, to derive 28 different regressions for newsprint consumption.

Each regression had a coefficient of determination of 95.6 or greater. However, projections of future consumption varied considerably depending upon the

variable (or variables) used and the assumed 1995 values of the independent variables.

The lowest projection (13.033 million tons) was that derived from the regression of newsprint consumption on population aged 20 and over. Numerous other regressions yielded 1995 consumption projections of over 15 million tons, as illustrated by the simple regression using the Real Gross National Product and a 3 percent Real GNP growth rate.

Figure II shows the results of 10 regression projections using 2.5 and 3.0 percent annual growth assumptions to derive 1995 values for most of the economic variables. However, the last three regressions involving either real disposable personal income and real personal consumption expenditures utilize the "heroic" assumption that the growth rates for these variables during the 1985-1995 period will be the same as in the previous ten-year period. This assumption is optimistic in light of the definite possibility of lesser overall economic growth during the years ahead. However, tax reform legislation may have a substantial positive effect on the future growth of both disposable personal income and personal consumption. Tax reform, by 1988, will decrease the federal income tax of many individuals and families, thus increasing their after-tax or disposable income. This increase may offset the personal income effect of a possible reduction in the U.S. economy's growth rate. Furthermore, increased take-home pay due to tax reform may stimulate economic growth because the U.S. economy is highly consumption oriented.

If either or both of these events occur, personal consumption expenditures will be enhanced. Because federal tax reform will result in lower income taxes for taxpayers with a low or modest income, most of the tax reduction is likely to be spent. Therefore, the future growth of personal consumption expenditures should be furthered.[16]

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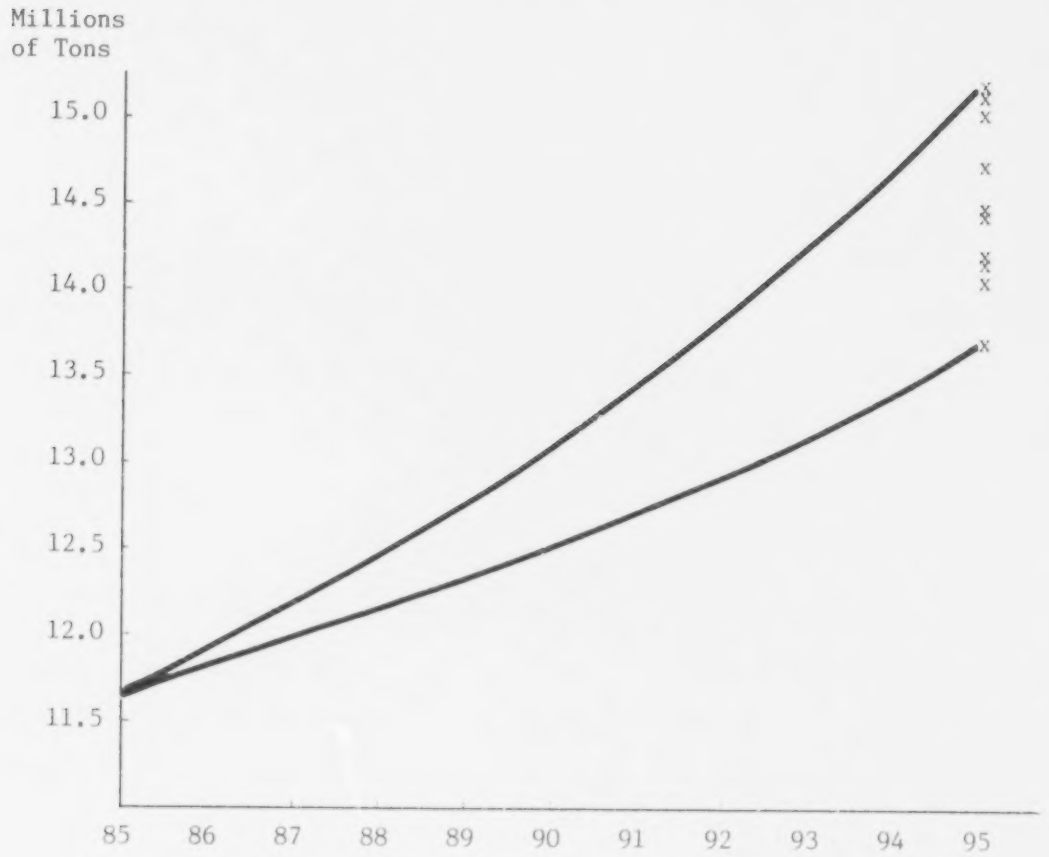
[16] However, possible future increases in federal income tax rates would erode the growth of personal disposable income and personal consumption expenditures.

Figure II

Regression Projections of U.S.
Newsprint Consumption in 1995



Independent Variable(s)	R^2	Assumed Economic Value for 1995*	1995 Newsprint Projection (Thousands of Tons)
Real GNP	98.5	$4.589 Trillion	14,455
Real GNP	98.5	$4.818 "	15,153
Population 20 and Over & Real GNP	98.6	$4.589 "	14,198
Population 20 and Over & Real GNP	98.6	$4.818 "	14,756
Total Population & RGNP	98.5	$4.589 "	14,490
Total Population & RGNP	98.5	$4.818 "	15,210
Total Population & Per Capita RGNP	97.7	$18,121	13,715
Total Population & Real Disposable Inc.	97.7	$3.308 Trillion	14,179
Population 20 and Over & Real Disposable Income	97.9	$3.308 "	14,059
Population 20 and Over & Real Personal Consumption	98.2	$3.156 "	15,030

*The population forecasts used are the middle series projections of the Bureau of the Census.

In any event, the ten regression projections for 1995 shown in Figure II range from a low of 13.71 to a high of 15.21 million metric tons (30-pound basis weight). The lowest projection is based on total population and Real GNP per capita. The $18,121 Real GNP per capita figure used in the projection assumes about a 2.8 percent growth rate of the economy. The highest projection is derived from the regression using total Real GNP and total population.

Projection for 1995

As noted earlier, the Fortune 500 executives who were surveyed assigned about a 50 percent probability to various forecasts of a financial or economic crisis between now and 1995. That probability happens to correspond closely with the author's view of the future. If such an event does occur, the growth of newsprint consumption will be temporarily diminished.

Assuming a period of severe economic stress in the years ahead but at least 2.5 percent average growth of the Real Gross National Product between 1985 and 1995, newsprint consumption is projected to reach 14.5 million metric tons in 1995. The 14.5 million ton figure is a trend value. Therefore, if 1995 is near the peak of a business cycle, actual consumption should exceed the projection. On the other hand, if 1995 is in or near the recessionary phase of the business cycle, consumption is likely to be less than 14.5 million tons. It is assumed that there will be no major war or catastrophe in the United States and the projected tonnage uses a 30-pound basis weight.

If there is no major period of economic stress in the United States between now and 1995 and a 3.0 percent or more economic growth rate is realized, U.S. newsprint consumption is likely to exceed 15 million tons by 1995. For example, if economic and newsprint consumption growth rates were to repeat those experienced during the 1975-1985 period, newsprint consumption would reach 16.3 million tons in 1995. However, it should be noted that there were no significant shortages of newsprint during the 1975-1985 period. If shortages were to arise in the years

ahead, the growth of newsprint consumption relative to national economic growth would be reduced.

In summary, U.S. newspapers and newsprint consumption are well positioned for future expansion. Assuming an adequate supply of newsprint but only 2.5 percent average annual economic expansion, U.S. newsprint consumption is projected to have a trend value of 14.5 million tons in 1995. With a higher rate of economic expansion, the consumption trend should exceed 15 million tons by 1995.

UNITED STATES BY REGIONS

Northeast

Connecticut
Maine
Massachusetts
New Hampshire
New Jersey
New York
Pennsylvania
Rhode Island
Vermont

North Central

Illinois
Indiana
Iowa
Kansas
Michigan
Minnesota
Missouri
Nebraska
North Dakota
Ohio
South Dakota
Wisconsin

South

Alabama
Arkansas
Delaware
District of Columbia
Florida
Georgia
Kentucky
Louisiana
Maryland
Mississippi
North Carolina
Oklahoma
South Carolina
Tennessee
Texas
Virginia
West Virginia

West

Alaska
Arizona
California
Colorado
Hawaii
Idaho
Montana
Nevada
New Mexico
Oregon
Utah
Washington
Wyoming

CANADIAN PROVINCES

East Canada

New Brunswick
Newfoundland
Nova Scotia
Ontario
Prince Edward Island
Quebec

West Canada

Alberta
British Columbia
Manitoba
Saskatchewan

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The Growth of Newspapers and the U.S. Economic and Newsprint Outlook for 1988

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Office of Business Economics

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Dr. Udell has written more than 150 articles and books on newspaper economics, marketing, consumer behavior, and economic development. He is author of The Economics of the American Newspaper, Marketing in An Age of Change, and numerous studies of newsprint supply and demand. Dr. Udell served as economic consultant to ANPA from 1964 through 1984, and was engaged to do this study.

He received his Bachelor and Master of Business Administration degrees, as well as a Doctor of Philosophy, from the University of Wisconsin-Madison. He is a member of various professional and honorary societies, including Phi Beta Kappa, Beta Gamma Sigma, Phi Kappa Phi, and Phi Eta Sigma. In addition, Dr. Udell has served on numerous government councils and committees and the boards of directors of private and public organizations. In 1973, Dr. Udell was named "Wisconsinite of the Year" and received the Sidney S. Goldish Award for "significant and continuing contributions to newspaper research." In 1986, he received the Robert A. Jerred Distinguished Service Award of the University of Wisconsin's School of Business.

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EXECUTIVE SUMMARY

U.S. newsprint consumption reached a record of almost 12 million metric tons in 1986. On a 30-pound basis weight, consumption slightly exceeded 12 million tons.

During the 1976-1986 period, U.S. newsprint consumption, 30-pound basis weight, advanced 38.2 percent. The growth rate of newsprint consumption was almost 22 percent more rapid than the real growth rate of the U.S. economy.

Newsprint consumption by U.S. daily newspapers reporting to ANPA increased 27.7 percent during the ten years. Although less than the overall increase of consumption, most or all of the difference undoubtedly is accounted for by the rapid growth of preprinted inserts which, ultimately, become a part of the newspaper.

Daily newspapers in the West and South enjoyed the most rapid growth during the 1976-1986 period. Their direct usage of newsprint advanced over 40 percent. Dailies in the Northeast increased their consumption by 24 percent. Dailies in the North Central Region expanded their direct consumption only 3 percent.

With the declining international value of the U.S. dollar, U.S. manufacturing industries are enjoying an expanded share of world markets. This should especially benefit the economies of the Northeast and North Central Regions and enhance the growth of newspapers in those regions.

There was an inverse relationship between size of city and the growth of newsprint consumption by daily newspapers during the 1976-1986 period. The direct consumption of newspapers in towns and cities of less than 100,000 population advanced 51 percent. On the other hand, direct consumption by dailies in cities of over one million persons declined slightly during the ten years.

Daily circulation increased only 2.7 percent during the 1976-1986 period, with all of the growth occurring in the West and South. It declined slightly in both the Northeast and North Central Regions. However, Sunday circulation

expanded in all regions of the nation to yield a total increase of more than 15 percent.

U.S. newsprint producers expanded their share of the U.S. newspaper market during the last ten years. U.S. mills increased their shipments to U.S. daily newspapers by 42.3 percent, whereas tonnage originating in Canada increased 15.4 percent.

As of 1986, the major sources of newsprint supply to U.S. dailies were East Canada--4.0 million tons, South U.S.--2.2 million tons, West U.S.--1.1 million tons, and West Canada--0.7 million tons.

Although the U.S. economy has exhibited substantial strength during recent months, the abrupt decline of the stock market in October reflects the fact that rapidly expanding debt threatens to undermine the economic vitality of the nation.

Given the recent turbulence of financial markets, predicting the economy of 1988 is unusually difficult. The probability of the commencement of a recession before year-end is high, even though political forces will attempt to preclude such an event. However, a Real Gross National Product which is about 2 percent more than that of 1987 appears likely, even with the potential onset of a recession. The major source of the increase is likely to be increased foreign exports by U.S. manufacturers. If U.S. exports do not rise, economic growth is not likely.

U.S. newsprint consumption is predicted to reach about 12.28 million metric tons (or 12.35 million tons, 30-pound basis weight) in 1987. Given the estimated 2 percent rise of the Real GNP, U.S. newsprint consumption also should advance by a similar percentage during 1988. The predicted increase assumes no disruption in the supply of newsprint or major strikes against U.S. newspapers. A 2 percent rise would yield a U.S. newsprint consumption of 12.5 million metric tons on a reported grammage basis during 1988.

ALL TONNAGE FIGURES IN THIS REPORT ARE IN METRIC TONS.

PART I

RECENT HISTORY OF U.S. NEWSPAPERS AND NEWSPRINT CONSUMPTION

United States newsprint consumption, adjusted to a 30-pound basis weight, slightly exceeded 12.0 million tons in 1986. The record high consumption was 3 percent greater than that of the prior year.

Major factors contributing to the increase were the continued expansion of the U.S. economy, a small increase of Sunday newspaper circulation, and an advance of newspaper advertising revenues. More specifically, during 1986 the nation's Real Gross National Product (Real GNP) rose 2.9 percent; Sunday newspaper circulation advanced to more than 58.9 million; and daily newspaper advertising revenues increased 7.2 percent. Offsetting a portion of these increases was a modest decline of daily circulation. Morning circulation rose 1.1 million, but evening newspaper circulation receded 1.3 million.

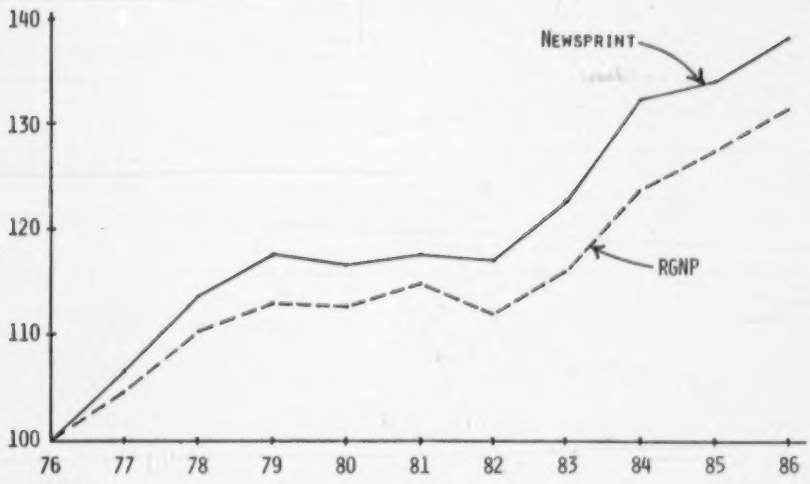
Looking more closely at advertising, local advertising expenditures in newspapers advanced 8.2 percent to $23.6 billion. Classified ads, especially for real estate, automobiles, and employment, enjoyed the largest increase. National newspaper expenditures rose 0.7 percent to about $3.4 billion. Total advertising expenditures in daily newspapers reached almost $27 billion. Newspapers' share of all advertising expenditures was 26.4 percent, down slightly from 26.6 percent in 1985.

The Rise of Newsprint Consumption

Historically, U.S. newsprint consumption has advanced approximately 2 percent for every 3 percent growth of the Real GNP. However, since 1976 U.S. newsprint consumption has grown more rapidly than the U.S. economy. As illustrated in Figure I, during most of the last ten years the growth rate of U.S. newsprint consumption has been greater than that of the Real Gross

Figure I

U.S. Newsprint Consumption and
Real Economic Growth, 1976-1986



Year	Newsprint Consumption[1]	Real GNP[2]	Newsprint Index	RGNP Index
1976	8,688	2826.7	100.0	100.0
1977	9,280	2958.6	106.8	104.7
1978	9,882	3115.2	113.7	110.2
1979	10,205	3192.4	117.5	112.9
1980	10,134	3187.1	116.6	112.7
1981	10,219	3248.8	117.6	114.9
1982	10,169	3166.0	117.0	112.0
1983	10,666	3279.1	122.8	116.0
1984	11,502	3501.4	132.4	123.9
1985	11,651	3607.5	134.1	127.6
1986	12,007	3713.3	138.2	131.4

[1] Thousands of metric tons, 30-pound basis weight.
Source: American Newspaper Publishers Association.

[2] Billions of 1982 dollars.
Source: Department of Commerce, Bureau of Economic Analysis.

National Product. As a result, U.S. newsprint consumption, 30-pound basis weight, expanded 38.2 percent during the 1976-1986 period, whereas the nation's real economy expanded 31.4 percent.

There is little reason to expect a major change in the relative strength of U.S. newsprint consumption. The maturation of the post-World War II baby crop has yielded an unusually large segment of the U.S. population which is in the most productive and most consumptive stage of the human life cycle. This demographic development should contribute to both national economic expansion and newspaper growth. Television, the newspaper's major competitor for advertising, is now a relatively mature industry with a growth rate which is similar to that of newspapers. In other words, the growth of U.S. newspaper advertising revenues is no longer being diminished by a rapid expansion of television. In addition, newspaper management has used advancing technology to the advantage of newspapers, rather than allowing the advance of communications technology to greatly erode the newspaper's share of the market.

Although future U.S. newsprint consumption growth may not continue to exceed the growth rate of the U.S. economy, it is likely to closely parallel the Real GNP's growth rate. However, a shortage of newsprint, should one occur, would limit the growth of newspapers and newsprint consumption. In addition, a major increase in the cost of newsprint could prompt newspapers to eliminate marginal circulation and raise the cost of advertising linage, thus slowing the growth of newsprint consumption.

A Decade of Newspaper Growth

The most recent decade for which complete data are available is 1976-1986. Because strikes against newspapers temporarily affect their newsprint consumption, the data should be adjusted for the impact of strikes against newspapers. However, in both 1976 and 1986 no tonnage was lost due to strikes. On the other hand, the consumption data are adjusted to a 30-pound basis weight. This provides a more accurate picture of newspaper growth than the use of actual tonnages.

As shown in Table I, newsprint consumption by daily newspapers reporting to ANPA rose 27.7 percent during the 1976-1986 decade. A major portion of the difference between this growth rate and that of total U.S. consumption undoubtedly is due to the rapid growth of preprinted advertising inserts. Most of the preprint tonnage is not included in U.S. newspapers' consumption data, even though the inserts ultimately became a part of the daily newspaper. Even without this preprint insert tonnage, daily newspapers accounted for 72.6 percent of the nation's newsprint consumption during 1986. While down from the 78.6 percent ratio of ten years earlier, ANPA's monthly 525 sample indicates that daily newspapers' share of total consumption has risen during 1987. This rise probably is due to a combination of newspaper growth, a slowing in the rise of preprinted inserts, and an increase of preprint production by daily newspapers.

Regional Consumption Changes

Table I also presents newsprint consumption data for daily newspapers in the four major regions of the United States. During the 1976-1986 period, newspapers in the West enjoyed the fastest rate of growth. Their newsprint consumption expanded 608,000 tons, an increase of almost 46 percent.

Newspapers in the South experienced the greatest absolute growth. Their newsprint usage expanded 803,000 tons or about 41 percent during the ten years.

Consumption by North Central Region newspapers grew very little, 59,000 tons or 3.3 percent. In the Northeast, newspaper usage of newsprint expanded 422,000

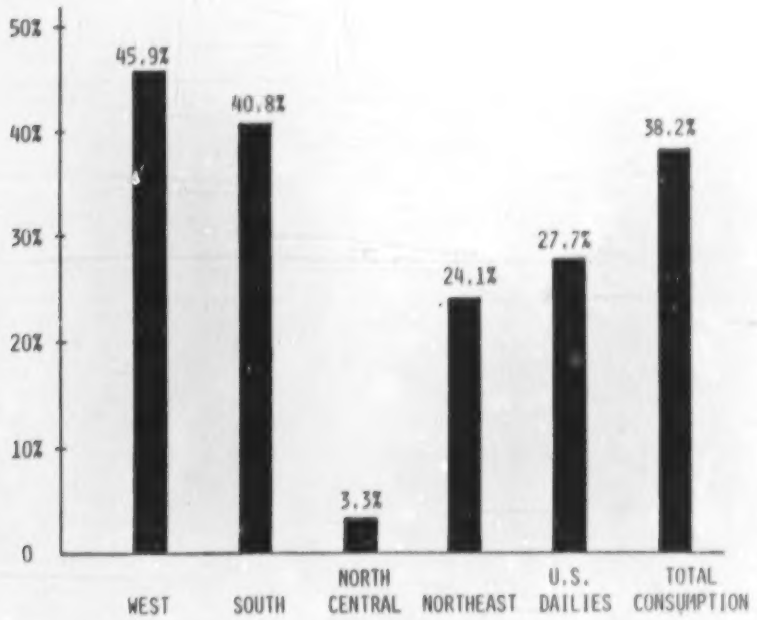
Table I

Changes in Newsprint Consumption by U.S.
Daily Newspapers in Various Geographic Regions

1976-1986[3]

Source: Daily Newspapers Reporting to ANPA

Region	1976 Consumption	1986 Consumption	Tons Change	Percent Change
Northeast	1,749,164	2,171,174	422,010	24.1
North Central	1,787,725	1,846,304	58,579	3.3
South	1,967,869	2,770,571	802,702	40.8
West	1,324,990	1,932,721	607,731	45.9
Total Consumption by U.S. Dailies	6,829,748	8,720,770	1,891,022	27.7
Total U.S. Consumption by All Users	8,688,000	12,007,000	3,319,000	38.2



[3]Tonnage is on a 30-pound basis weight. The newspaper consumption data do not include foreign language newspapers, college newspapers, special service dailies, The Christian Science Monitor, The Wall Street Journal, The Journal of Commerce and The Daily Racing Form. No strike loss occurred in 1976 or 1986. Total consumption by U.S. dailies may not precisely equal regional or city-size data because of rounding. A listing of the regions is shown on page 23.

tons during the 1976-1986 period, an increase of over 24 percent. That increase undoubtedly is related to the economic resurgence of several Northeastern states in recent years. There is promise of a similar resurgence in the more industrialized states of the North Central Region. The declining international value of the U.S. dollar appears to be benefiting the manufacturing industries of those states.

Newsprint Growth by City Size

A ten-year analysis of newsprint consumption by newspapers in cities of various sizes is presented in Table II. Newspapers in each of the city-size classifications of less than one million population expanded considerably during the 1976-1986 period.

Daily newspapers in towns and cities of less than 100,000 people enjoyed the highest rate of growth--over 51 percent. Their ten-year consumption increase of 852,000 tons accounted for 45 percent of the total rise of newsprint consumption by all daily newspapers reporting to ANPA.

Newspapers located in cities of 100,000 to 250,000 people experienced a 41 percent growth of newsprint usage--408,000 tons more than in 1976.

In cities of one-quarter to one-half million population, consumption expanded 433,000 tons or 34 percent during the 1976-1986 period. Newspapers in cities of one-half to one million population increased their newsprint usage by 307,000 tons or almost 25 percent.

Newsprint consumption by newspapers in cities of over one million declined 109,000 tons for a loss of 6.6 percent during the 1976-1986 period.

Newspapers in towns and cities of less than 100,000 are the largest consumers of newsprint. Their 2.5 million ton consumption as of 1986 exceeded the newsprint usage of newspapers in each other city-size classification by a substantial margin.

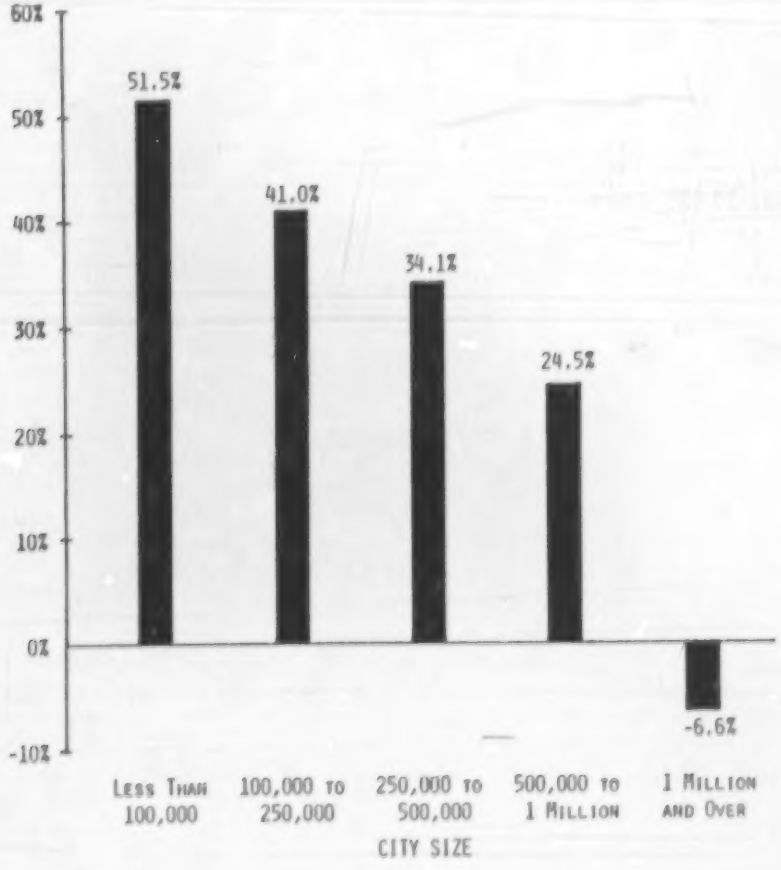
Table II

Changes in Newsprint Consumption by U.S. Daily Newspapers in Cities of Various Sizes

1976-1986[4]

Source: Daily Newspapers Reporting to ANPA

City Size	1976 Consumption	1986 Consumption	Tons Change	Percent Change
Less than 100,000	1,655,092	2,507,256	852,164	51.5
100,000 to 250,000	994,991	1,402,801	407,810	41.0
250,000 to 500,000	1,271,029	1,704,420	433,391	34.1
500,000 to 1 million	1,253,651	1,560,734	307,083	24.5
1 million and over	1,654,985	1,545,559	-109,426	-6.6
All Daily Newspapers	6,829,748	8,720,770	1,891,022	27.7



[4] Ibid.

Regional Circulation

As previously noted, circulation is a major factor in the rise or fall of newsprint consumption. The daily circulation of the U.S. newspapers included in this analysis was 60.52 million as of 1986--1.57 million more than ten years earlier.

Daily circulations in the four geographic regions of the United States are shown in Table III. The highest rate of circulation growth occurred in the West, where daily circulation rose almost 1.5 million or 14.8 percent during the 1976-1986 period.

Daily circulation also expanded in the South. Here circulation expanded almost 1.6 million, a gain of 9.5 percent.

Daily circulation in the North Central Region fell 865,000 or 5.2 percent during the 1976-1986 decade. In the Northeast, circulation declined 637,000 or 4.1 percent during the ten years.

The Sunday circulation of U.S. newspapers increased in all regions. In the West, Sunday circulation expanded 27.2 percent to 11.5 million in 1986. Southern newspapers enjoyed a 19.9 percent rise to more than 18.8 million circulation in 1986.

Sunday circulation as of 1986 totalled 14.7 million in the North Central Region and 13.6 million in the Northeast. Circulation in the North Central Region was up 11.8 percent from that of a decade earlier. Among dailies in the Northeast, Sunday circulation rose 4.9 percent during the 1976-1986 period.

Table III

Regional Changes in Circulation of U.S. Daily Newspapers

1976-1986[5]

Source: Standard Rate & Data Service, Inc.

DAILY CIRCULATION

Region	1976	1986	Change	Percent Change
Northeast	15,511,976	14,875,082	-636,894	-4.1
North Central	16,643,822	15,778,885	-864,937	-5.2
South	16,743,724	18,331,390	1,587,666	9.5
West	10,054,429	11,539,419	1,484,990	14.8
Total	58,953,951	60,524,776	1,570,825	2.7

SUNDAY CIRCULATION

Region	1976	1986	Change	Percent Change
Northeast	12,951,220	13,583,677	632,457	4.9
North Central	13,182,047	14,743,236	1,561,189	11.8
South	15,694,364	18,811,392	3,117,028	19.9
West	9,021,116	11,470,628	2,449,512	27.2
Total	50,848,747	58,608,933	7,760,186	15.3

Circulation by Size of City

During the ten years daily circulation rose in all city-size classifications of less than one-half million population. As shown in Table IV, total daily circulation of newspapers in cities of less than 100,000 expanded almost 2.1 million or 8.4 percent. Their 1986 circulation, totaling 26.9 million, was substantially larger than that of any other city-size classification.

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[5]See Footnote 3, Table I, for newspapers not included in the analysis.

Table IV

Changes in Circulation of Daily Newspapers
in Cities of Various Sizes

1976-1986[6]

Source: Standard Rate & Data Service, Inc.

DAILY CIRCULATION

City Size	1976	1986	Change	Percent Change
Less than 100,000	24,855,551	26,942,442	2,086,891	8.4
100,000 to 250,000	8,684,362	9,586,248	901,886	10.4
250,000 to 500,000	8,988,825	9,329,001	340,176	3.8
500,000 to 1 million	7,460,545	7,106,644	-353,901	-4.7
1 million and over	8,964,668	7,560,441	-1,404,227	-15.7
All U.S. Dailies	58,953,951	60,524,776	1,570,825	2.7

SUNDAY CIRCULATION

City Size	1976	1986	Change	Percent Change
Less than 100,000	13,277,915	19,366,716	6,088,801	45.9
100,000 to 250,000	8,336,863	11,469,957	3,133,094	37.6
250,000 to 500,000	9,503,184	11,259,943	1,756,759	18.5
500,000 to 1 million	8,414,881	8,215,957	-198,924	-2.4
1 million and over	11,315,904	8,296,360	-3,019,544	-26.7
All U.S. Dailies	50,848,747	58,608,933	7,760,186	15.3

The daily circulation of newspapers in cities of 100,000 to 250,000 population rose 902,000 or 10.4 percent. In cities of one-quarter to one-half million, the increase was 340,000 or 3.8 percent.

Circulation losses were experienced in cities of more than one-half million population during the 1976-1986 period. Daily circulation declined 354,000 or 4.7 percent among cities of one-half to one million population. In urban centers of one million or more, the decline was 1.4 million or 15.7 percent during the ten years.

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[6] Ibid.

Changes in Sunday circulation were inversely related to city size. In towns and cities of less than 100,000, Sunday circulations grew 6.1 million or 46 percent. Sunday circulation expanded 3.1 million or almost 38 percent in cities of 100,000 to 250,000. In cities of one-quarter to one-half million population the growth was 1.8 million or 18.5 percent. Total Sunday circulation declined 0.2 million in cities of one-half to one million population. The Sunday circulation of large metropolitan newspapers decreased 3.0 million or 26.7 percent between 1976 and 1986.

Numerous small city newspapers have added Sunday editions during the past decade. This has enhanced the total Sunday circulation of small city newspapers while adversely affecting some large city newspaper circulations. In addition, rising costs of production and delivery have increased circulation rates. This has adversely affected the out-of-town circulation of metropolitan newspapers, especially where a local Sunday newspaper is available.

Newsprint Supply, 1976-1986

Sources of newsprint supply for daily newspapers in each region of the United States are shown in Table V. These data also are adjusted to a 30-pound basis weight.

While newsprint consumption by U.S. daily newspapers reporting to ANPA rose 27.7 percent during the ten years, United States mills increased their tonnage supplied to these newspapers by 42.3 percent. The tonnage originating in Canada increased 15.4 percent. As a result, the U.S. producers' share of the newspaper market rose from 38.8 percent in 1976 to 43.3 percent in 1986. Canada's share of the market declined from 60.0 percent to 54.2 percent during the ten years. Overseas suppliers accounted for 1.2 percent of the U.S. newspaper market in 1976 and 2.5 percent in 1986.

Table V

Source of Newsprint Supply for U.S. Daily Newspapers

1976-1986[7]

Source: Daily Newspapers Reporting to ANPA

Location of Suppliers	Tons Supplied 1976	Tons Supplied 1986	Tons Change	Percent Change	Share of Supply 1976	Share of Supply 1986
United States	2,652,916	3,774,931	1,122,015	42.3	38.8	43.3
Northeast	430,208	366,565	-63,643	-14.8	6.3	4.1
North Central	91,509	83,017	-8,492	-9.3	1.3	1.0
South	1,471,404	2,248,110	776,706	52.8	21.5	25.8
West	659,795	1,077,239	417,444	63.3	9.7	12.4
Canada	4,098,143	4,731,107	632,964	15.4	60.0	54.2
East	3,425,374	3,997,330	571,956	16.7	50.1	45.8
West	672,769	733,777	61,008	9.1	9.9	8.4
Overseas	78,689	214,732	136,043	172.9	1.2	2.5
Total Supply to U.S.	6,829,748	8,720,770	1,891,022	27.7	100.0	100.0

Despite the 1976-1986 decline in Canada's share of the market, mills in East Canada increased their shipments to U.S. newspapers by 16.7 percent, while mills in West Canada increased their tonnage 9.1 percent during the ten-year period.

Southern U.S. newsprint mills expanded their shipments to U.S. daily newspapers by 777,000 tons or 52.8 percent during the 1976-1986 period. Also enjoying a substantial increase--417,000 tons or 63.3 percent--were mills located in the West Region of the United States. Mills in the Northeast and North Central Regions saw their shipments to newspapers decline during the 1976-1986 period.

As of 1986, the major sources of supply to U.S. daily newspapers were East Canada (4.0 million tons), the South U.S. (2.2 million tons), West U.S. (1.1 million tons) and West Canada (0.7 million tons).

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[7] See Footnote 3, Table I.

Sources of Supply, By Region

The sources of supply for daily newspapers in each region of the United States are shown in Table VI. During 1986, newspapers in the Northeast received almost 78 percent of their newsprint from East Canada, with most of the remaining supply (15 percent) coming from Northeast U.S. mills. Southern mills supplied about 6 percent of northeast newspapers' requirements.

North Central daily newspapers received 83 percent of their newsprint from Canadian mills during 1986, with most of that supply coming from East Canada. Southern mills supplied 12 percent of the newspapers' requirements. Less than 5 percent of North Central newspapers' supply originated within their region.

Southern newspapers received two-thirds of their newsprint from southern mills in 1986. Canadian mills, primarily producers in East Canada, supplied over 27 percent of the southern newspapers' requirements.

As of 1986, West U.S. newspapers received over 53 percent of their supply from West U.S. mills. One-third of their newsprint came from West Canadian mills. East Canadian mills supplied 5.4 percent of the West's requirements, while off-shore producers supplied 5.7 percent.

Consumption in 1987

It appears that both the U.S. economy and newsprint consumption will realize approximately 3 percent real growth during 1987. However, daily newspapers reporting monthly to ANPA advanced their newsprint consumption by 4.9 percent during the first nine months of the year. The relatively strong growth of consumption by daily newspapers probably is the product of newspaper growth, a slowing in the rise of preprinted advertising inserts, and increased production of preprints by newspapers.

Table VI

Regional Sources of Newsprint for U.S. Daily Newspapers

1976-1986[8]

Source: Daily Newspapers Reporting to ANPA

Location of Suppliers	Tons Supplied 1976	Tons Supplied 1986	Tons Change	Percent Change	Share of Supply 1976	Share of Supply 1986
		NORTHEASTERN NEWSPAPERS				
United States	414,478	454,629	40,151	9.7	23.7	20.9
Northeast	382,523	325,741	-56,782	-14.8	21.9	15.0
North Central	755	-------	-755	inf.	nil	----
South	31,200	128,050	96,850	310.4	1.8	5.9
West	-------	838	838	inf.	----	nil
Canada	1,301,611	1,690,762	389,151	29.9	74.4	77.9
East	1,301,049	1,690,293	389,244	29.9	74.4	77.9
West	562	469	-93	-16.5	nil	nil
Overseas	33,075	25,783	-7,292	-22.0	1.9	1.2
Total Supply to Northeast	1,749,164	2,171,174	422,010	24.1	100.0	100.0
		NORTH CENTRAL NEWSPAPERS				
United States	255,766	308,354	52,588	20.6	14.3	16.7
Northeast	13,214	-------	-13,214	inf.	0.7	----
North Central	85,222	82,239	-2,983	-3.5	4.8	4.5
South	143,437	224,865	81,428	56.8	8.0	12.2
West	13,893	1,250	-12,643	-91.0	0.8	----
Canada	1,531,959	1,532,087	128	nil*	85.7	83.0
East	1,442,468	1,493,097	50,629	3.5	80.7	80.9
West	89,491	38,990	-50,501	-56.4	5.0	2.1
Overseas	-------	5,863	5,863	inf.	----	0.3
Total Supply to North Central	1,787,725	1,846,304	58,579	3.3	100.0	100.0
		SOUTHERN NEWSPAPERS				
United States	864,296	1,362,637	498,341	57.7	54.7	66.7
Northeast	41,252	39,784	-1,468	-3.6	2.6	2.0
North Central	-------	7,852	7,852	inf.	----	0.4
South	814,979	1,312,444	497,465	61.0	51.6	64.2
West	8,065	2,557	-5,508	-68.3	0.5	0.1
Canada	645,193	680,358	35,165	5.5	40.8	33.3
East	641,666	676,579	34,913	5.4	40.6	33.1
West	3,527	3,779	252	7.1	0.2	0.2
Overseas	70,151	-------	-70,151	-100.0	4.5	----
Total Supply to South	1,741,254	2,042,995	463,355	29.3	100.0	100.0
		WESTERN NEWSPAPERS				
United States	455,103	870,352	415,249	91.2	37.5	58.2
Northeast	-------	2,497	2,497	inf.	----	0.2
North Central	-------	------	------	----	----	----
South	299	1,660	1,361	454.5	0.02	0.1
West	454,804	866,195	411,391	90.4	37.5	57.9
Canada	738,082	624,809	-113,273	-15.4	60.8	41.8
East	22,939	8,433	-14,506	-63.2	1.9	0.6
West	715,143	616,376	-98,767	-13.8	58.9	41.2
Overseas	20,314	-------	-20,314	-100.0	1.7	----
Total Supply to West	1,213,499	1,495,161	281,662	23.2	100.0	100.0

[8] Ibid.

PART II

THE OUTLOOK FOR 1988

U.S. newsprint consumption during 1988 undoubtedly will be heavily influenced by the course of the economy. As of November 1987, the current economic expansion is five years old--aged relative to historical standards. However, the duration of the expansion has little impact on whether or not it will continue through 1988.

As of September 1987, the U.S. economy appeared vigorous. Consumer confidence was at the highest level in almost 15 years; U.S. employment rose to 113 million, up 13.5 million from that of five years earlier; unemployment was below 6 percent, the lowest level since 1979; the index of leading economic indicators had risen for the preceding seven consecutive months. However, in October the stock markets of the world crashed. On October 19, the New York Stock Exchange suffered the greatest decline in its history. Confidence in the U.S. and world economies was badly shaken and most economists commenced revision of their optimistic forecasts for 1988.

The Turmoil of Financial Markets

A major downward movement in corporate equity prices usually precedes a recession by about six months, but a recession does not always follow. The stock market has been accused of "predicting nine of the last six recessions." However, the severity of the downfall in October has shaken the confidence of many and economic growth is highly influenced by business and consumer psychology.

Numerous reasons have been given as to why financial markets crashed and continue to experience substantial turbulence. However, it is your author's opinion that two major factors are responsible.

First, equity securities were grossly overpriced, especially on some foreign markets--such as a public utility, Nippon Telephone and Telegraph Corporation,

which reached a 300-to-1 price/earnings ratio on the Tokyo Exchange. Closer to home, the Dow Jones average had reached the level attained in 1929 and numerous other measures of equity prices were at record highs by a substantial margin.

Second, although the U.S. economy had grown almost 20 percent during the last five years, it was and is plagued by deep underlying problems because of numerous financial excesses. One result of these financial excesses was the overevaluation of equity securities. However, the basic cause of the excesses is gross overspending and heavy debt:

- Within the public sector, there have been huge spending increases and large federal deficits for many years, especially when GAAP (Generally Accepted Accounting Principles) are used. Usually, federal deficit spending substantially retreats or is eliminated during periods of economic expansion; however, this has not occurred during most expansionary years since 1975.

- Within U.S. industry, total corporate debt is at a record high level. Historically, corporate debt, relative to equity, is paid down during periods of economic expansion. Although many U.S. corporations have conformed to this historical pattern, management buyouts and other corporate acquisitions have helped to cause total U.S. corporate debt to rise, rather than fall, during the longest peacetime expansion of the U.S. economy.

- Within the consumer sector, debt ratios have reached an all-time high and personal savings have fallen to an historic low. Traditionally, U.S. citizens save 6 to 7 percent of their disposable or after-tax income. As of August 1987, the savings rate stood at 1.8 percent.

As recently as 1982, the United States was the largest creditor nation of the world. As a result of the above financial indiscretions, it is now the largest debtor nation. Equally distressing, a huge portion of the increased debt has been used to finance current consumption or the purchase of existing business assets, rather than new productive assets which strengthen the economy.

As predicted in ANPA's newsprint study of 1986,[9] a period of severe economic stress is likely prior to 1995. The current turmoil in the financial industry could precipitate the realization of that prediction. However, if financial institutions can survive the current turbulence without great damage, perhaps both public and private management will be prompted to get their financial affairs in order, thus pre-empting a precipitous decline of the U.S. and world economies. Among the measures necessary to accomplish that end are reduced reliance on debt financing, the avoidance of trade barriers among nations, increased U.S. investment in new industrial capacity and productivity improvement, increased exports, and a substantial reduction of the U.S. negative balance of trade and payments. The fact that such measures may be initiated at a time when the U.S. economy is enjoying substantial progress (e.g., increased exports, rising productivity, and relatively low business inventories) increases the probability of their success.

The Economy in 1988?

The economy of 1988 depends heavily on such factors as consumer and business reaction to events in the securities markets, the impact of changing stock values and the decline of the U.S. dollar on international credit flows, and U.S. monetary and fiscal policy. With these and other unknowns, such as the future course of interest rates, it is unusually difficult to predict the economy. The best that can be reasonably anticipated is a modest expansion of the U.S. Gross

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[9] Jon G. Udell, An Economic Analysis of U.S. Newspaper Growth and Newsprint Consumption, with Projections for 1995, American Newspaper Publishers Association, Washington, D.C., December 1986, p. 28.

National Product, the worst is a financial crisis and the beginning of a severe recession. Hopefully, a constructive response to recent events will pre-empt the latter.

The Consumer Sector. Although most consumers do not invest in corporate securities, consumer spending will be diminished by the decline of stock values and the heavy debt burden of most U.S. households. The demand for high priced goods and luxury items is likely to suffer the greatest impact.

Although the revised federal income tax code will diminish the discretionary income of most middle to high income taxpayers, it will increase the take-home pay of a much larger number of lower income taxpayers. This, along with a projected $25 billion dollar reduction of the total federal income tax burden, will enhance the purchasing power of the consumer sector. The net effect is likely to be a small rise of consumption expenditures.

Business Capacity and Expenditures. Despite five consecutive years of economic expansion, U.S. industry can accommodate further growth. On average, industry is operating at only 81 percent of total capacity. The greatest capacity constraint is the supply of appropriate labor skills, even though the unemployment rate is approximately 6 percent of the labor force.

The outlook for business investment has been diminished by the turbulence in financial markets. Fears of recession and the need for improved financial ratios in some industries will reduce their investment expenditures. As a result, total real business expenditures for inventories, plant and equipment are likely to decline somewhat during the year ahead.

Construction and Homebuilding. The outlook for construction is similar to that of business investment, primarily because of excess capacity (e.g., office space) and economic uncertainty. Homebuilding is likely to decline, especially if interest rates were to rise. However, if the Federal Reserve System can

continue to suppress interest rates, there could be approximately 1.5 million new housing units constructed during 1988--fewer than in 1987, but not substantially less.

Government Expenditures. The growth of government spending is likely to be unusually modest unless recessionary conditions prompt a substantial rise of public assistance expenditures.

Foreign Trade. None of the preceding economic sectors hold much promise for growth during 1988. However, the diminished international value of the U.S. dollar is helping to suppress imports and enhance exports, especially in real terms. With the relatively heavy manufacturing orientation of the Northeast and North Central Regions, their economies are benefiting. In any event, the primary determinant of economic progress during 1988 will be U.S. exports and imports. Unless a severe worldwide recession were to develop, the outlook for U.S. international trade is more favorable than it has been for many years.

The net result is likely to be a modest rise of the U.S. Real Gross National Product in 1988 from that of 1987, but with a high probability of the commencement of a recession before year-end. Some foreign economies are definitely likely to enter a recession during the year ahead due to the decline in their stock markets and reduced exports, such as to the United States.

Given the financial turmoil of recent weeks, it is too early to offer a firm forecast for 1988. However, reasonable Real GNP estimates (in 1982 dollars) would be $3.81 trillion for 1987 and $3.89 trillion for 1988--an increase of 2 percent from that of 1987. Events in the days ahead could lead to a revision of these initial estimates, with the probability of a downward adjustment exceeding that of an upward adjustment. However, 1988 is a major election year and politicians will strongly favor measures to prevent the onset of a recession. Should politically stimulated measures and/or natural economic forces prevent the onset of a recession during 1988, more than 2 percent real growth is likely to be realized.

U.S. Newsprint Consumption in 1988

Newsprint consumption usually is adversely affected by the commencement of a recession. However, with 1988 being a presidential election year, there should be a substantial volume of political advertising. Therefore, if 2 percent real economic growth and the commencement of a recession occur during 1988, U.S. newsprint consumption also is likely to increase 2 percent, assuming no major loss of consumption due to strikes against newspapers or a disruption of newsprint supply.

It appears that U.S. newsprint consumption will total approximately 12.28 million tons in 1987, or 12.35 million metric tons on a 30-pound basis weight. In either case, the increase will be about 3 percent higher than in 1986. If the estimated economic and newsprint growth for 1988 were to materialize, U.S. newsprint consumption would reach 12.5 million metric tons on a reported grammage basis and 12.6 million tons on a 30-pound basis weight.

As a final note, events during the past year lead to the conclusion that ANPA's trend projection for U.S. newsprint consumption through 1995 continues to appear accurate. That projection yielded a U.S. consumption trend of 14.5 million metric tons, 30-pound basis weight, for 1995.

UNITED STATES BY REGIONS

Northeast

Connecticut
Maine
Massachusetts
New Hampshire
New Jersey
New York
Pennsylvania
Rhode Island
Vermont

North Central

Illinois
Indiana
Iowa
Kansas
Michigan
Minnesota
Missouri
Nebraska
North Dakota
Ohio
South Dakota
Wisconsin

South

Alabama
Arkansas
Delaware
District of Columbia
Florida
Georgia
Kentucky
Louisiana
Maryland
Mississippi
North Carolina
Oklahoma
South Carolina
Tennessee
Texas
Virginia
West Virginia

West

Alaska
Arizona
California
Colorado
Hawaii
Idaho
Montana
Nevada
New Mexico
Oregon
Utah
Washington
Wyoming

CANADIAN PROVINCES

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